

JACC March 19, 2003

## POSTER SESSION

**1040 Drug Therapy in the Elderly: Benefits and Hazards**

Sunday, March 30, 2003, Noon-2:00 p.m.

McCormick Place, Hall A

Presentation Hour: 1:00 p.m.-2:00 p.m.

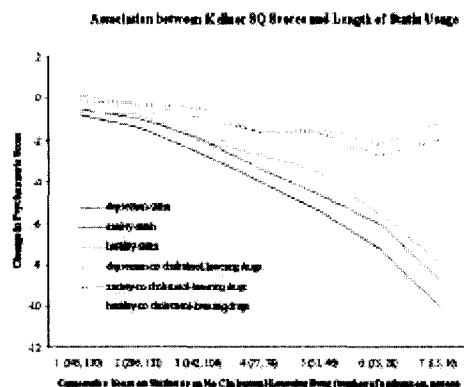
**1040-82 Long-Term Statin Use and Psychological Well-Being in the Elderly**

Yinong Young-Xu, Arnold Chan, James K. Liao, Shmuel Ravid, Charles M. Blatt, Lown Cardiovascular Research Foundation, Brookline, MA, Harvard School of Public Health, Boston, MA

**Background:** The effect of long-term statin use on psychometric measures was studied in a cohort of elderly patients with coronary disease.

**Methods:** The exposure of interest was long-term statin use and the outcomes of interest were depression, anxiety, and hostility as measured annually with the Kellner Symptom Questionnaire. The Generalized Estimating Equation and multiple logistic regression estimated the odds ratios (ORs) and 95% confidence intervals (CI), to represent the association between statin use and risk of abnormal depression, anxiety, and hostility scores.

**Results:** 606 study subjects (average age 67, 80% male) mean follow-up 4 years, maximum 7 years were followed. Comparing the 140 patients with continuous statin use and 231 who did not use cholesterol-lowering drugs, statin use was associated with lower risk of abnormal depression scores (OR, 0.64; 95% CI, 0.43 - 0.93), anxiety scores (OR, 0.62; 95% CI, 0.43-0.90), and hostility scores (OR, 0.65; 95% CI, 0.45-0.93) after adjustment for confounders. No association was found when 219 patients with intermittent statin use and non-statin cholesterol-lowering drug use were compared with 231 patients who did not use cholesterol-lowering drugs. The risk of an abnormal psychometric score decreased over time. The beneficial psychological effects of the statins appeared to be independent of its cholesterol-lowering effect. **Conclusions:** Long-term statin use is associated with reduced risk of anxiety, depression, and hostility in the elderly.

**1040-83 Outcomes of an Elderly Population Undergoing Maximal Medical Therapy**

Thomas B. Graboys, Yinong Young-Xu, Charles M. Blatt, Shmuel Ravid, Brian Bilchik, Lown Cardiovascular Research Foundation, Brookline, MA

**Background:** Clinical trials among patients with coronary heart disease (CHD) have traditionally excluded patients greater than 75 years of age and certainly those over 80 years. **Methods:** We evaluated outcomes among a geriatric population >75 and >80 years (76% males) as part of a larger CHD database. Twenty-two percent (166) were over age 75 at entry and 417 (54%) over age 75 at the time of data analysis. **Results:** At a mean follow up of 64.4 months, the average age of those over 80 years was 85.5 years. Patients underwent traditional noninvasive cardiac evaluation and received maximal medical therapy. Average ejection fraction was 59%. Over the follow-up period, 160 (38%) met criteria for coronary intervention (CI), though only 52 (21%) were actually referred for CI. The criterion was principally defined as a significant change in the pattern of angina. The annualized rate of myocardial infarction was 2.4% and annualized cardiac mortality 1.3%. **Conclusions:** These data emphasize that a geriatric population >age 75 years undergoing maximal medical therapy for their CHD have excellent long-term outcomes and that utilizing data from clinical trials among a younger CHD population may be extrapolated to geriatric and octogenarian populations with intact left ventricular function. Furthermore, changes in anginal pattern remain an important and valid criterion for CI in the elderly population.

## ABSTRACTS - Cardiac Function and Heart Failure 153A

**1040-84****Thrombolytic Therapy but Not Primary Angioplasty Is Associated With an Early Hazard in Patients >75 Years Old With Acute Myocardial Infarction: Results of the PPRIMM75 Registry**

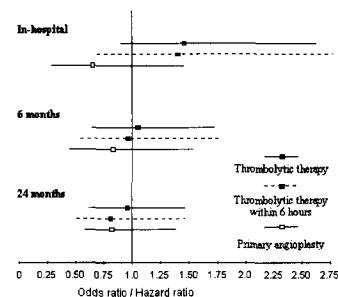
Hector Bueno, Manuel Martinez-Selles, Esther Perez-David, Hamon Lopez-Palop, Hospital General Universitario "Gregorio Marañon", Madrid, Spain

**Background.** The efficacy and safety of thrombolytic therapy (TT) in patients >75 years old is still controversial.

**Methods.** To assess the results of TT in older patients, we analyzed the in-hospital, 6-month and 24-month mortality in a cohort of 516 consecutive patients admitted to a CCU for a first-time ST-segment/LBBB AMI enrolled in the PPRIMM75 (Pronóstico del Primer Infarto de Miocardio en Mayores de 75 años) Registry according to the type of treatment received: no reperfusion (n=314), TT (n=118) or primary angioplasty (PA, n=84).

**Results.** Patients treated with TT were admitted earlier (median: 3 vs. 5 hours), more frequently in Killip class I (77% vs 65%) and had a higher LVEF than non-reperused patients (all p<.01). Compared with patients treated with PA, those who received TT had a significantly lower proportion of diabetes (27% vs 45%), anterior infarcts (42% vs 57%), LVEF < 0.31 (10% vs 24%) and Killip class I (23% vs 46%). The crude in-hospital mortality was 33.8% in non-reperused patients, 28.8% in those treated with TT and 29.8% with PA. After excluding patients arriving in shock, the figures were: 28%, 27.4% and 17.9% respectively. The graph shows the odds ratio of in-hospital mortality and the hazard ratios for 6- and 24-month mortality for reperused patients compared with non-reperused patients after adjustment for baseline differences.

**Conclusion.** Thrombolytic therapy may be associated with an early increase in mortality in elderly patients with AMI, an effect not observed with PA.

**1040-85****National Trends of Lower Target Intensity Among Elderly Patients Taking Warfarin: The Anticoagulation Consortium to Improve Outcomes Nationally (ACTION) Study**

Stephen L. Kopecky, Susan Regan, Robyn McClelland, Sherry Stewart, Elaine M. Hylek, Mayo Clinic, Rochester, MN, Massachusetts General Hospital, Boston, MA

**Background.** Since risk of warfarin-related hemorrhage increases with age and INR, some physicians use a lower INR target for older patients (80 years or older) with atrial fibrillation (AF). We assessed use and impact of lower target ranges in a national cohort of patients taking warfarin. **Methods.** Anticoagulation clinics were recruited across the U.S. from 1999-2001. Physician-assigned INR target ranges were analyzed for AF, stroke, or prosthetic valve. The % of subtherapeutic INRs for patients with a lower target range was compared to the 2-3 range, or 2.5-3.5 for valves. INRs from the first 2 months were excluded. **Results.** 6,706 patients were enrolled from 100 clinics in 38 states accumulating 5,929 person-years. 44% of patients were female; and 22% were age 80 or over. Increasing age was associated with lower INR target (p < 0.0001) (table). For stroke or AF, only 5% of patients overall were assigned an INR target range < 2.3. However, patients with lower targets were at greatly increased risk for subtherapeutic INRs compared to those in the standard range. For patients age 80 or over vs. < 80 years: for AF, 40% of INRs were < 2 vs. 21%; stroke, 43% vs. 19%; prosthetic valve, 52% of INRs were less than 2.5 vs. 28%, and 19% vs. 8% were less than 2.0 (p < 0.0001). **Conclusion.** Lower INR targets are more frequently used in older patients. Given the increased exposure to INRs less than 2, more data are needed to be certain of the risk vs. benefit in this group.

## Use of Lower INR Target Range Across Age

	Atrial Fibrillation n=3,242	Stroke n=498	Prosthetic Valve n=745
Age, yrs	Upper INR target limit less than 3	Upper INR target limit less than 3	Upper INR target limit less than 3.5
60-69	2% (14/678)	4% (5/140)	9% (24/256)
70-79	4% (58/1528)	5% (12/234)	15% (52/357)
Greater than or = to 80	7% (70/1036)*	10% (12/124) p=.037	27% (35/132)*